

Evaluation of immunomodulatory effect : selection of the correct targets for immunostimulation study.

Abstract

Problem statement: Numerous plants or remedies that are traditionally used for various diseases had been claimed to maintain general good health, particularly the immune system. With the advanced understanding on immunology and ethnopharmacology, study on the interaction of this herb with the immune system is critical to understand the safety and its efficacy as a potent immunomodulatory agent. Approach: Selecting proper immune cells from a suitable immune organ allowed for the understanding on the mode of immunomodulation. Lymphocytes isolated from mammalian thymus, spleen and bone marrow represented great candidates for this immunomodulatory study. Results: A number of herbal extracts including that of *Rhaphidophora korthalsii* and compounds isolated from this plant, namely lectin and zerumbone, had been identified as potent immunostimulators. Conclusion/Recommendations: Future studies are needed to elucidate the mechanism underlaying activities of these immunomodulatory agents.

Keyword: Immunomodulation; Mitogen; PBMC; Spleen.